



# 1971

OPERATING

SUMMARY

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## CHESTERVILLE

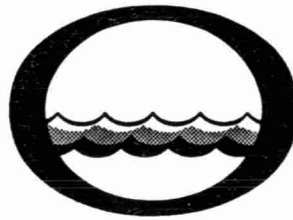
# WATER POLLUTION CONTROL PLANT

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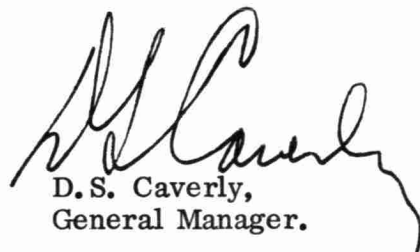



***Water management in Ontario***

Ontario  
Water Resources  
Commission

We are pleased to submit for your consideration a summary of operation during 1971 of the water pollution control plant serving your community.

This operating summary contains parameters normally used to measure plant performance and loading, as well as relevant cost data. Because of the concern over eutrophication of our lakes and of the requirement, in many parts of Ontario, to remove the major contributing factor, results of analysis for phosphorus appear in this summary.

  
D.S. Caverly,  
General Manager.

  
D.A. McTavish, P. Eng.,  
Director,  
Division of Plant Operations.

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## CHESTERVILLE

# WATER POLLUTION CONTROL PLANT

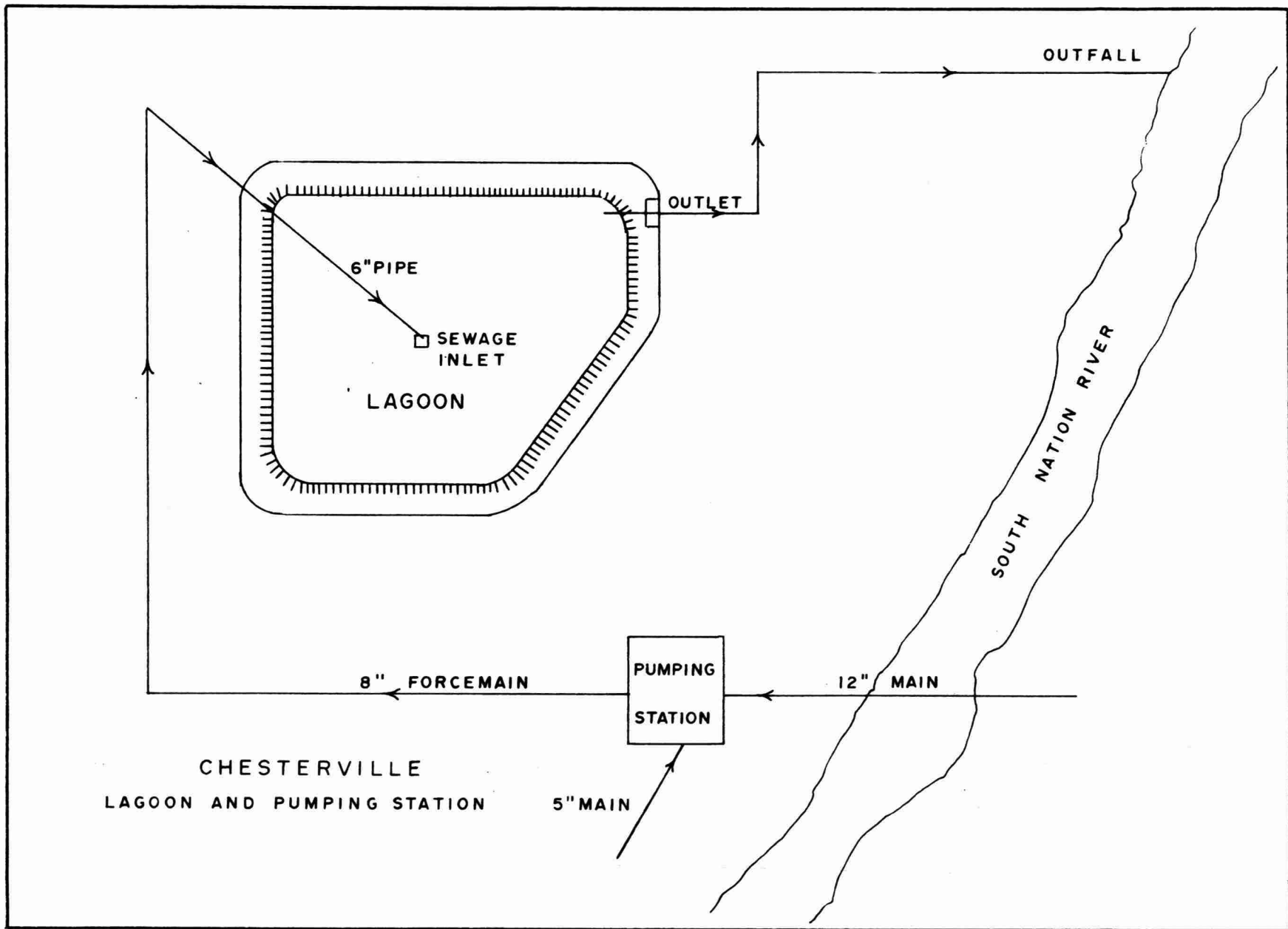
## 1971 ANNUAL OPERATING SUMMARY



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## DESIGN DATA

PROJECT NO.	1-0048-66	Approximately 23,000 linear feet of sewer ranging from 8" - 18"
TREATMENT	Stabilization Pond	1350 feet of 8 inch forcemain
DESIGN FLOW	160,000 gpd	1 General Supply Co. prefabricated sewage pumping station.
DESIGN POPULATION	2,000	360 US gpm @ 25' TDH
		12.5 acre stabilization pond



# '71 Review

## SEWAGE SYSTEM

This system consists of a prefabricated underground pumping station and a forcemain, a sewage collection system and a 12.5 acre single celled waste stabilization pond.

The Chesterville Sewage Treatment works treated 13.78 million gallons of sewage from May to December in 1971. This represents an average daily flow of .056 million gallons.

It appeared that a considerable amount of ground water gained access into the sewer system. Efforts were being made by plant staff to locate and repair any deficient areas of the sewage collection system.

Excessive high water levels in the South Nation River during the spring runoff flooded several manholes and caused high flows in the sewer system for several days.

## EXPENDITURES

The operating costs incurred by the OWRC were \$17,130.33 which greatly exceeded the operating budget of \$7,300.00. These high costs can be attributed to high initial equipment costs during the first year of operation, the installation of several extra sewer services and the allocation of 100 percent of the salary charges to the sewage project. All future operating costs will reflect a 50 percent salary split between the water and sewage treatment projects.

## REPAIRS and MAINTENANCE

As with the water system all repairs experienced at the plant in 1971 were of a minor nature. The operation and maintenance of the plant has been very satisfactory.

## CONCLUSIONS

A concentrated effort will be made by all staff during 1972 in an attempt to locate and remove any sources of ground water that are gaining access into the sewer system.

ONTARIO WATER RESOURCES COMMISSION

CHESTERVILLE SEWAGE WORKS SYSTEM

PROJECT NO. 1-0048-66

BALANCE SHEET

AS AT DECEMBER 31, 1971

(UNAUDITED)

ASSETS

ACCOUNTS RECEIVABLE	\$ 19,323.47
FIXED ASSETS (at cost)	712,444.10
	<hr/>
TOTAL ASSETS	\$731,767.57
	<hr/>

LIABILITIES AND EQUITY

CURRENT LIABILITIES	\$ 45,702.43
LONG TERM DEBT	364,106.48
EQUITY	
Contributed	363,413.06
Amortized principal on long term debt	922.55
Earned Surplus/Deficit	
Deficit at beginning of year	(\$ 7,026.84)
Deficit for the year 1971	(\$35,350.11)
	<hr/>
TOTAL LIABILITIES AND EQUITY	\$731,767.57
	<hr/>

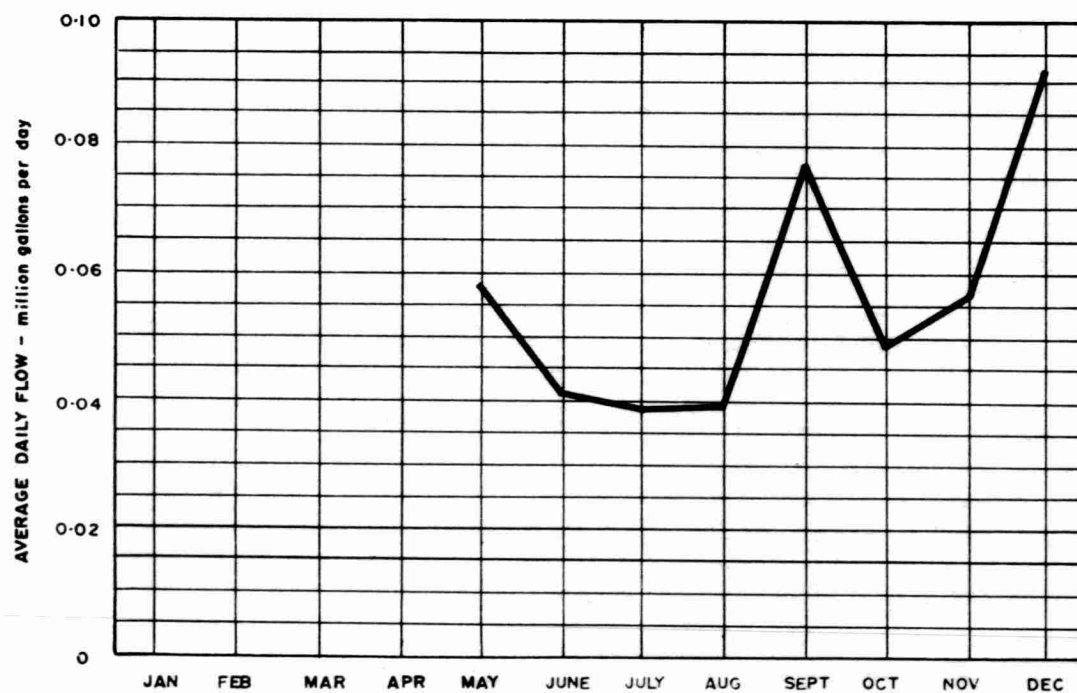
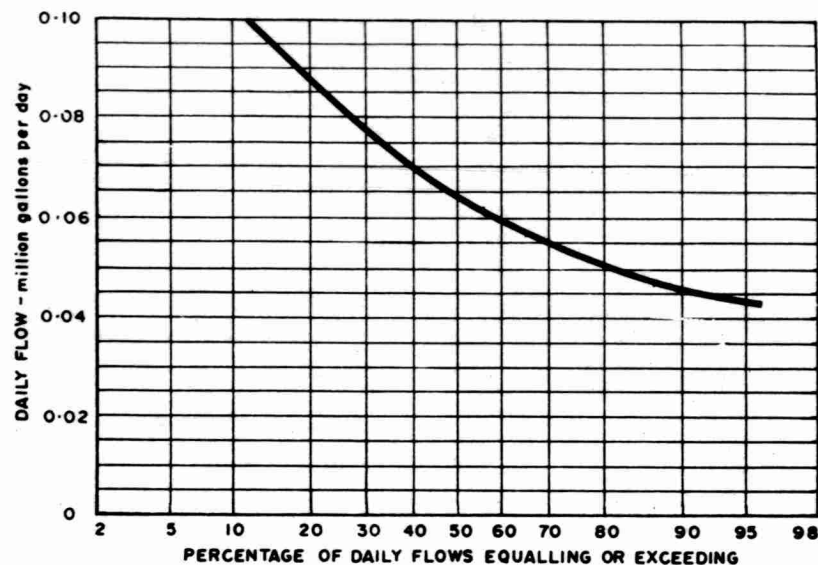
Notes

Prepared on accrued basis.

Contributed equity includes provincial assistance of \$268,591.43.

# PROCESS DATA

# FLOWS



## PLANT PERFORMANCE

MONTH	FLOWS				BIOCHEMICAL OXYGEN DEMAND			SUS. SOLIDS		TOTAL PHOSPHORUS		
	TOTAL FLOW	AVERAGE DAY	MAXIMUM DAY	MAXIMUM RATE	INFLUENT	EFFLUENT	LOADING	INFLUENT	EFFLUENT	INFLUENT	EFFLUENT	REDU
	million gallons	mil gal	mil gal	mgd	mg/l	mg/l	lb BOD/acre/day	mg/l	mg/l	mg/l as P	mg/l as P	%
JAN												
FEB												
MAR												
APR												
MAY	1.770	.057										
JUNE	1.260	.042				9			10			
JULY	1.200	.039										
AUG	1.200	.039										
SEPT	2.310	.077										
OCT	1.514	.049	.072		140	2	7	90	15	6.5	.1	98
NOV	1.669	.056	.079									
DEC	2.865	.092	.174									
TOTAL	13.788*	-	-	-	-	-	-	-	-	-	-	-
AVG.	-	.056	MAXIMUM .174	MAXIMUM	140	6	7	90	13	6.5	.1	98
No. of Samples	-	-	-	-	1	2	- -	1	2	1	1	-

\* 245 days flow

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